

**REMARKS/DISCUSSION OF ISSUES**

Claims 1-10 and 12-19 are pending in the application.  
Claims 1-10 and 12-19 are rejected.

The Examiner's entry of the previous amendments and withdrawal of the objections to the drawing(s) and the specification is noted with appreciation.

Claims 1, 7-10, 12 and 13

Claims 1, 7-10, 12 and 13 are again rejected under 35 USC 102(b) as being anticipated by Mabe.

In response to Applicant's argument that the addition of the phrase 'free flowing' to claim 1 makes clear that Applicant's diffusely reflecting powder is not trapped inside a matrix (such as the oil varnish of Mabe), but is free flowing inside the space formed by the light-transmitting element, the Examiner has responded that a reasonable interpretation of the added phrase is that the powder is free flowing prior to adhesion to a varnish layer, and has been unable to find any language in the specification to support a different interpretation, e.g., that the powder retains its free flowing character after manufacture.

However, the specification states that it is known to provide a surface of a lighting fixture with a white, smooth coating consisting of white, light-scattering particles, which are present in a binder matrix and which are bonded to the surface of the lighting fixture therewith. See page 2, lines 12-15.

The specification then states that there are drawbacks to this coating, one being the use of organic solvents, and another being that the application is time-consuming, because relatively thick coating layers are required which need to be

dried carefully. Furthermore, the coating is usually not capable of withstanding the high operating temperatures of the lighting device. See page 2, lines 22-26.

The specification then states that the object of the invention is to overcome these drawbacks, by providing a lighting device with a light reflector comprising a light-transmitting element bounding a space, and a diffuse reflective, free flowing powder inside this space. See specification, page 2, line 30 through page 3, line 1.

This language makes clear that the invention replaces the coating of powder particles of the prior art with a light-transmitting space containing a free flowing reflective powder.

Moreover, there is no language in the specification which contradicts this clear language. There is no mention of coatings or binders of any sort.

Thus, the contention that Applicant's powder is no longer free flowing after manufacture has no support in the specification. On the contrary, the clear language of the specification makes clear that the powder remains free flowing after manufacture. In such form, it is able to overcome the disadvantages of the particle/binder coating of the prior art.

Accordingly, claims 1, 7-10, 12 and 13 are not anticipated by Mabe, and the rejection should be withdrawn.

#### Claims 2-5

Claims 2-5 are again rejected under 35 USC 103(a) as being unpatentable over Mabe and Ono.

In response to Applicant's argument that neither Mabe nor Ono teaches nor suggests that their reflective layers contain any particles of calcium halophosphate, calcium pyrophosphate,  $\text{BaSO}_4$ ,  $\text{MgO}$ ,  $\text{YbO}_3$  or  $\text{TiO}_2$  (claim 2), or that the particles have an average diameter ranging between 0.1 and 100  $\mu\text{m}$  (claim 3),

or that the particles are mixed with fine-grained  $\text{Al}_2\text{O}_3$  particles having an average diameter which ranges between 10 and 50 nm (claim 4), or that the amount of fine-grained  $\text{Al}_2\text{O}_3$  particles ranges between 0.1 and 5 wt. % (claim 5), and that such materials, particle sizes and amounts could only have been arrived with the aid of hindsight from Applicant's own teachings, which is not permitted in judging obviousness under Section 103, the Examiner has responded that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

However, neither Mabe nor Ono teach that any of the disclosed materials are suitable for use in a reflective layer, and the Examiner has provided no other reference to establish the suitability of such materials for the intended use.

The Examiner has stated that Ono teaches the use of  $\text{Al}_2\text{O}_3$  'as provided above'.

However, Ono does not teach that particles of calcium halophosphate, calcium pyrophosphate,  $\text{BaSO}_4$ ,  $\text{MgO}$ ,  $\text{YbO}_3$  or  $\text{TiO}_2$  having an average diameter ranging between 0.1 and 100  $\mu\text{m}$  are mixed with fine-grained  $\text{Al}_2\text{O}_3$  particles having an average diameter which ranges between 10 and 50 nm, or that the amount of fine-grained  $\text{Al}_2\text{O}_3$  particles ranges between 0.1 and 5 wt.%, as claimed by Applicant.

Thus, Ono does not teach the use of  $\text{Al}_2\text{O}_3$  'as provided above'.

Regarding Applicant's argument that neither Mabe nor Ono teaches or suggests that the particles have an average diameter ranging between 0.1 and 100  $\mu\text{m}$  (claim 3), or that the particles are mixed with fine-grained  $\text{Al}_2\text{O}_3$  particles having an average diameter which ranges between 10 and 50 nm (claim 4), the

Examiner has responded that determining size is generally recognized as being within the level of ordinary skill in the art, and that discovering an optimum value of a result effective variable involves only routine skill in the art.

However, in *Ex parte Hartmann et al.*, USPTO Board of Patent Appeals and Interferences, Appeal No. 2004-1092, <http://www.uspto.gov/go/dcom/bpai/decisions/fd041092.pdf>, it was observed that one of ordinary skill in the art would recognize that catalyst size is a result effective variable because the prior art teaches that a smaller size non-porous catalyst would be expected to have a larger surface area available for furnishing catalyzed reaction sites. Consequently, one of ordinary skill in the art would have been led to the claimed catalyst sizes upon routine experimentation. (page 6).

However, in Applicant's case, there is nothing in Mabe or Ono to indicate any relationship between particle size of a free flowing powder and reflectivity or any other property, because Mabe and Ono were not concerned with the use of free flowing powder.

Thus, particle size of Applicant's free flowing reflective powder is not a result effective variable, but the result of inventive effort.

Accordingly, claims 2-5 are patentable over the combination of Mabe and Ono, and the rejection should be withdrawn.

#### Claim 6

Claims 6 is rejected under 35 USC 103(a) as being unpatentable over Mabe. Claim 6, which is dependent on claim 1, is patentable for the reason that Mabe does not teach or suggest that his reflective layer is composed of free flowing

powder. Accordingly, claims 6 is patentable over Mabe, and the rejection should be withdrawn.

Claim 14

Claims 14 is rejected under 35 USC 103(a) as being unpatentable over Mabe.

Claim 14, which is indirectly dependent on claim 1, is patentable for the reason that Mabe does not teach or suggest that his reflective layer is composed of free flowing powder.

Accordingly, claim 14 is patentable over Mabe, and the rejection should be withdrawn.

Claim 15

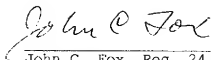
Claims 15 is rejected under 35 USC 103(a) as being unpatentable over Mabe.

Claim 15 specifies that the powder is 'free flowing'. Thus, claim 15 is patentable for the reason that Mabe does not teach or suggest that his reflective layer is composed of free flowing powder.

Accordingly, claim 15 is patentable over Mabe, and the rejection should be withdrawn.

In conclusion, Applicant respectfully requests the Examiner to withdraw the rejections and objections of record, allow all the pending claims, and find the application to be in condition for allowance.

Respectfully submitted,



John C. Fox, Reg. 24,975  
Consulting Patent Attorney  
315-828-6292